



**(57) Abstract**

The preferred embodiment applies communal string field of the SNMP message to secure the SET operation between the agent and the client. Each communal string is applied only once and new one is determined with the same secure algorithm at both ends. The used secure algorithm is based on random seed and can provide the system with required security by complex enough creation of the new communal string from the seed. The applied communal string should contain enough bits, so that anyone monitoring the traffic cannot use random/sequence strings. The method, the system and the entities according to the invention are very practical because they can provide the ordinarily insecure network communication protocol such as the Simple Network Management Protocol (SNMP) with some secure and authentication and yet preserve the simple philosophy of such a communication way.

Fig. 3